CLAIMS

1. System for enhancing the security of the e-mails transmitted from a sender (10) to a receiver (12) over a data transmission network such as Internet wherein a Message Transfer Agent (MTA) (14) associated with said sender is in charge of transmitting over said network an original e-mail sent by said sender;

   said system being characterized

   in that said MTA associated with said sender includes a message splitting means (16) adapted to divide said original e-mail into a plurality of chunks according to a predetermined algorithm and a predetermined list of relay MTAs (20, 22, 24) to which are forwarded said plurality of chunks; and

   in that it comprises a chunk assembly agent (28) for receiving from said relay MTAs the plurality of chunks and re-assembling them by using said predetermined algorithm in order to re-build said e-mail before sending it to said receiver.

2. The system according to claim 1, wherein each of said plurality of chunks is transmitted as a chunk e-mail having a destination address which is the address of said chunk assembly agent (28).

3. The system according to claim 2, wherein each of said plurality of chunks is encrypted by using the public key of said chunk assembly agent (28) before being transmitted over said network.

4. Method for enhancing the security of the e-mails transmitted from a sender (10) to a receiver (12) over a data transmission network such as Internet wherein a Message Transfer Agent (MTA) (14) associated with said sender is in charge of transmitting an original e-mail sent by said sender;

   said method being characterized in that it consists in using an algorithm for dividing said original e-mail into a plurality of chunks, and sending these chunks as e-mails to different relay MTAs (20, 22, 24) defined in a predetermined list of relay MTAs, re-assembling by a chunk assembly agent said chunks in order to re-build said original e-mail by using said predetermined algorithm, before sending said original e-mail to said receiver.

5. The method according to claim 4, wherein each chunk is transmitted over said network in a chunk e-mail having a destination address which is the address of said chunk assembly agent.

6. The method according to claim 4, wherein each chunk is encrypted by using the public key of said chunk assembly agent before being transmitted, said encrypted chunk e-mail being decrypted when received by said chunk assembly agent using its private key.

7. The method according to claim 6, wherein the text of said original e-mail is encrypted by using the public key of said receiver before being divided into a plurality of chunks.